

NEW SPECIES OF APHELANDRA (ACANTHACEAE)
FROM PERU AND ECUADOR

Dieter C. Wasshausen

Department of Botany
National Museum of Natural History, MRC-166
Smithsonian Institution
Washington, D.C. 20013-7012, U.S.A.

ABSTRACT

Six new species of *Aphelandra* are recognized from Peru and Ecuador. They are the following: *Aphelandra plowmanii* Wassh., *A. knappii* Wassh., *A. davidsonii* Wassh., *A. aucayacuensis* Wassh. and *A. schunkei* Wassh. from Peru and *A. espinosae* Wassh. from Ecuador.

RESUMEN

Se reconocen seis nuevas especies de *Aphelandra* de Perú y Ecuador. Son las siguientes: *Aphelandra plowmanii* Wassh., *A. knappii* Wassh., *A. davidsonii* Wassh., *A. aucayacuensis* Wassh. y *A. schunkei* Wassh. de Perú y *A. espinosae* Wassh. de Ecuador.

Aphelandra, a neotropical genus of about 230 species which extends from northwestern Mexico southeastward through regions of both wet and dry forests to the state of Santa Catarina in southeastern Brazil and to the province of Salta in southwestern Argentina. No native specimens of the genus are found in the West Indies. In the number of species and in morphological diversity the genus reaches its zenith in the Andean mountains of western South America and in Brazil. Presently, 61 species have been described from Colombia, 41 species from Ecuador, 38 species from Peru and 44 species from Brazil. Like most Acanthaceae, they are found to be of extremely local distribution and range, only 15% are found to be more widespread, in undisturbed forests and are rarely collected in secondary growth.

The genus is distinguished from other Acanthaceae genera by being devoid of cystoliths, the familiar character by which most acanthaceous plants are recognized, by having 4 stamens with narrow, 1-thecous anthers and by having ellipsoidal pollen grains bearing 3 longitudinal clefts, each of which often possess one pore. Its flowering spikes are often large and showy, including the bracts and bractlets, and in certain species variegated or colored leaves occur. Important characters in the genus, which link large series of species, are the presence or absence of spiny intepetiolar bracts, of teeth, spiny or otherwise, on the margins of the leaf blades or flower bracts, and of ocelli on the flower bracts.

The nearest relative is probably the Old-World genus *Crossandra*, consisting of about 50 species from Africa and Asia. In *Crossandra*, the upper corolla lip is absent or the corolla is dorsally deeply cleft, whereas in *Aphelandra* the upper lip always present.

Aphelandra plowmanii Wasshausen, sp. nov. (Fig. 1A-E). TYPE: PERU. LORETO. PROV. Maynas: Río Ampiyacu, Pebas and vicinity, 3°10'S, 71°49'W, 10 Apr 1977, T. Plowman, R.E. Schultes & O. Tovar 6732 (HOLOTYPE: US).

Unbranched shrub or treelet 1.5–2 m tall; stem terete to subquadrate, glabrous below, the upper portion densely hirsute, the trichomes appressed, 1–1.5 mm long. Leaves sessile or short-petiolate, the petioles 5–40 mm long, hirsute, the blades oblanceolate, 22–40 cm long, 7.5–12 cm wide, acuminate at apex, gradually narrowed from the middle or slightly above the middle and decurrent at base, the veins (12–14 pairs) puberulous, prominent beneath, less so above, the upper surface a darker green than the lower surface, both sparingly and inconspicuously puberulous, the margin entire or slightly undulate. Inflorescence a solitary, terminal, sessile or subsessile spike 12–19 cm long and 4–5 cm broad (excluding corollas), moderately dense, the rachis sparingly pubescent with appressed trichomes to 1 mm long, the flowers opposite to subopposite along the spike axis; bracts bright orange, recurving, broadly elliptic, 33–43 mm long, 17–18 mm wide, acute to rounded at

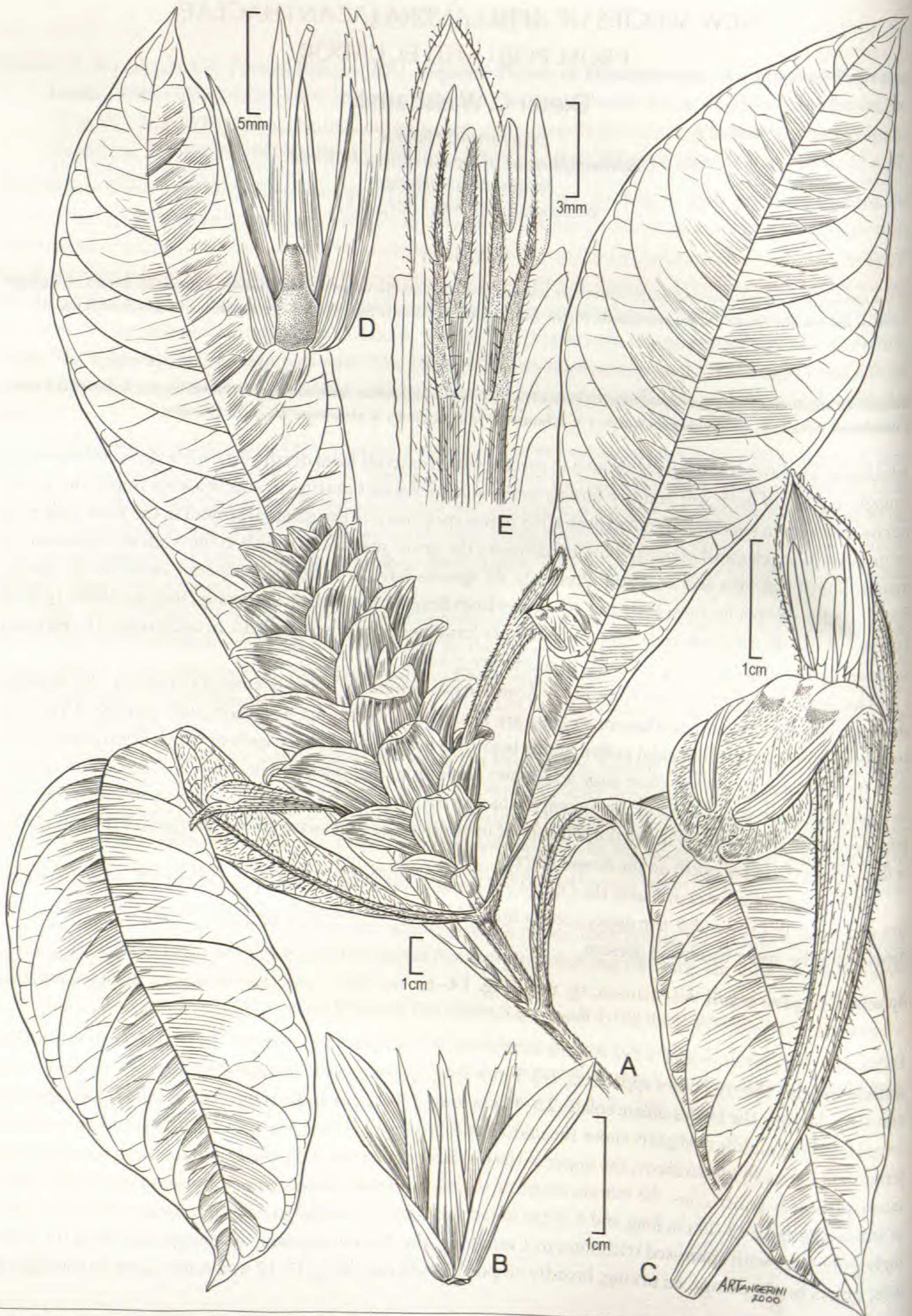


FIG. 1. A-E: *Aphelandra plowmanii* (Plowman et al. 6732). A. Habit. B. Bractlets and calyx lobes. C. Corolla. D. Calyx lobes, ovary and pistil. E. Corolla opened showing attachment of filaments and anther thecae.

apex, attenuate basally, glabrous, rather firm, distinctly parallel veined, margin entire; bractlets elliptic to oblanceolate, 20–22 mm long, 3–3.5 mm wide, glabrous, acute and reticulately veined apically; calyx deeply lobed, 17–20 mm long, the lobes lanceolate, the posterior segment larger, 20 mm long and 4 mm wide, somewhat erose at apex, the anterior pair 19–20 mm long and 3.5 mm wide, the lateral pair 17 mm long and 3 mm wide, all glabrous and subhyaline; corolla white tinged with magenta on lower lip or the tube carmine red, lip yellow with two dark-red spots at throat, 80 mm long, tomentose, especially on the upper part of the tube, throat and upper lip, the tube curved, 2.5 mm wide at base then gradually enlarged to 7 mm at throat, the upper lip erect, ovate, 22–25 mm long and 3.5–4 mm wide, entire and cucullate at apex, lower lip spreading, 3-lobed, the middle lobe obovate, 14 mm long and 1.75–2 mm wide, truncate at tip, the lateral lobes obovate 2 mm long and wide; stamens slightly exerted beyond the mouth of the corolla tube; anthers unequal, posterior thecae 3.5 mm long, anterior thecae 6 mm long; ovary minutely punctate. Capsule not seen.

Aphelandra plowmanii is morphologically similar to *A. crispata* Leonard emend. Wasshausen from Amazonian Colombia and Ecuador. The new species is distinguished by having leaf margins entire or slightly undulate, bracts bright orange and recurving and corollas that are either white tinged with magenta on lower lip or tube carmine red, lower lip yellow with two dark-red spots at throat. In contrast, in *A. crispata* the lateral veins terminating in broad teeth 1–5 mm high and 2–2.5 cm apart, the bracts are red to purplish, crisped or twisted but not recurved and corollas are pinkish-purple to violet.

Distribution.—Along trails and in mature upland forest on well-drained alluvial soil, 130–ca 600 m elevation.

Material studied in addition to the type: **PERU. San Martín**: along road between Tocache Nuevo and Juanjui, ca. 96 km N of Tocache Nuevo, 84 km S of Juanjui, 14.1 km beyond bridge over Río Pulcache (and town of San Martín not Pulcache as on maps), ca. 600 m, 7°41'S, 76°40'W, 8 Apr 1984, Croat 58000 (MO, US). Loreto: Prov. Maynas, Indiana, Explorama Inn, 3°30'S, 73°05'W, 108 m, 12 Apr 1992, Vasquez, Grandez & Jaramillo 18217 (MO, US); ca. 2 km W of Indiana on Rio Amazonas, 3°30'S, 73°02'W, 130 m, 13 Feb 1987, Gentry, Vasquez & Jaramillo 55808 (MO, US); Explorer's Inn near Indiana, 3°30'S, 73°3'W, 130 m, 14 Feb 1989, Gentry, Vasquez & Jaramillo 65745 (MO, US).

Aphelandra knappii Wasshausen, sp. nov. (**Fig. 2A–H**). TYPE: PERU. SAN MARTÍN. Prov. Lamas: Convento, trail to Nuevo Lamas, km 68 of Tarapoto-Yurimaguas road, 6°16'S, 76°17'W, 200 m, 20 Aug 1986, Sandra Knapp 8077 (HOLOTYPE: US; ISOTYPE: MO).

Herb or shrub 1–4 m tall; stems terete to subquadrangular, glabrous, drying dark-purplish. Leaves long-petiole, the petioles 3–5 cm long, glabrous, drying dark-purplish, the blades broadly elliptic to ovate, 15–20 cm long, 6–10 cm wide, acuminate at apex, narrowed and attenuate at base, glabrous, thin, the veins (10–12 pairs) glabrous, conspicuous on both the upper and lower surface, the margin entire and slightly undulate. Inflorescence of 3–5 short, axillary and terminal spikes, these few-flowered and congested at the tips of the branches, the peduncles 3–4 cm long, glabrous, drying dark-purplish; bracts obovate, somewhat asymmetrical, 12–15 mm long and 8–10 mm wide, rather thin, glabrous, obtuse or rounded at apex, venation prominent, margin entire; bractlets oblong to lanceolate, 4 mm long and 1 mm wide, minutely ciliolate at tip; calyx 4–4.5 mm long, deeply lobed, lobes subequal, posterior lobe oblong, 4–4.5 mm long and 2 mm wide, truncate at apex, anterior pair lanceolate, 5 mm long and 1.5 mm wide, the lateral pair 5 mm long and 1 mm wide; corollas yellow with lobes apically green-tipped, 40 mm long, tube glabrous without and tomentose within at insertion of filaments base, the tube suberect, 36 mm long, 1 mm wide at base, this to 5 mm above base, then gradually enlarged to 7–9 mm at mouth, the lips spreading, the upper lip 5–6 mm long, the 2 lobes 4 mm long and 3 mm wide, rounded, the lower lip 3-lobed, the middle lobe 4 mm long, 3.5 mm wide, the lateral lobes 3.5 mm long and 3.5 mm wide; stamens exerted 8–10 mm beyond the mouth of corolla tube; filaments 40 mm long, tomentose at base; anther thecae 5 mm long, dorsally tomentose; pollen white; ovary 2 mm high; style 55 mm long, exerted. Capsule clavate, 15 mm long, 5 mm wide, blunt at tip, nitid, glabrous; seeds dark brown, flat, subcircular, 4 mm in diameter, sparingly papillose.

Aphelandra knappii is morphologically similar to *A. jacobinioides* Lindau also found in Ecuador and Peru. The new species is distinguished by having broadly elliptic to ovate, glabrous leaf blades, peduncles 3–4 cm long, glabrous, these drying dark-purplish, bracts obovate, somewhat asymmetrical, 12–15 mm long, obtuse or rounded at apex and corollas yellow, with lobes apically green-tipped, 40 mm long, tube 36 mm long and



FIG. 2. A–F: *Aphelandra knappii* (Knapp 8077). A. Habit. B. Bract. C. Bractlets and calyx lobes. D. Corolla and stamens. E. Corolla expanded showing attachment of filaments, anther thecae and ovary and pistil.

7–9 mm wide at mouth. In contrast, in *A. jacobinioides* the leaf blades are oblong-elliptic, the pubescent peduncles are 1–2 cm long, not drying dark-purplish, the bracts are broadly ovate, symmetrical, 10 mm long, truncate and submucronate at apex and the corollas are orange to yellow, 48 mm long, the tube 42 mm long and 16 mm wide at mouth.

Distribution.—Tropical wet forest, red clay and white sand at elevations between 200–800 m.

Material studied in addition to the type: **PERU. San Martín:** Lamas, Convento, trail to Tioyacu and Nuevo Lamas, km 68 of Tarapoto-Yurimaguas road, 6°16'S, 76°17'W, ca. 270 m, 16 Jun 1984, *Knapp & Mallet* 6522 (BH, US); Lamas, trail from Convento to Nuevo Lamas, km 68 Tarapoto-Yurimaguas, 6°16'S, 76°17'W, 200–800 m, 22 Mar 1986, *Knapp & Mallet* 6896 (MO, US); Lamas, Convento trail to Tioyacu and Nuevo Lamas (then to Rio Shanusi), km 68 of Tarapoto-Yurimaguas road, 6°16'S, 76°17'W, ca. 200 m, 19 Apr 1986, *Knapp & Mallet* 7105 (MO, US). **Loreto:** Balsapuerto, 220 m, Jan 1933, *Klug* 2847 (US); Balsapuerto (lower Rio Huallaga basin), 150–350 m, 28–0 Aug 1929, *Killip & Smith* 28617 (US).

Aphelandra davidsonii Wasshausen, sp. nov. (**Fig. 3A–H**). TYPE: PERU. HUANUCO: Cordillera Azul, ca. 38.2 km E of Tingo María on road to Pucallpa, 1730 m, 19 Nov 1979, *Christopher Davidson and Josephine Jones* 9276 (HOLOTYPE: US; ISOTYPE: LAM).

Low shrub ca. 1.3 m tall; stem terete to subquadrate, glabrous, drying brownish. Leaves long-petiolate, the petioles (unwinged portion) 1.5–2.5 cm long, glabrous to sparingly and inconspicuously puberulous, the blades elliptic to oblong, 10.5–15 cm long, 3.5–5 cm wide, glabrous, acuminate at apex, narrowed from above the middle and attenuate at base, firm, the veins (10–11 pairs) slightly raised and conspicuous both above and below, glabrous, secondary veins conspicuous on lower surface, margin entire. Inflorescence of 4–5 short, axillary and terminal spikes, these yellow, few-flowered and congested at the tip of branches, the peduncles 1.5–2 cm long, canaliculated, glabrous; bracts yellow, narrowly obovate, somewhat asymmetrical, 10–12 mm long and 7–8 mm wide, firm, glabrous, obscurely 2-lobed at apex, cuneate at base, margin entire; bractlets lanceolate to narrowly ovate, 3–3.5 mm long, 1–1.5 mm wide, striate-nerved, subhyaline, glabrous; calyx 5 mm long, lobes lanceolate, striate-nerved, subhyaline, glabrous, the posterior lobe 2 mm wide, the anterior pair 1 mm wide, the lateral pair 0.5 mm wide, both pairs mucronulate at apex; corolla yellow-green, 28 mm long, glabrous, the tube suberect, 25 mm long, 2 mm wide at base, 4 mm wide at mouth, the upper lip 3–4 mm long, the lobes 1 mm long and 2.5 mm wide, rounded, the lower lip 3-lobed, the middle lobe 3 mm long and 3 mm wide, the lateral lobes 3 mm long and 2 mm wide, all obtuse or rounded; stamens reaching the tip of the upper lip; filaments tomentose at point of insertion; anther thecae 2.5 mm long; ovary 3 mm high; style 28 mm long, exserted. Capsule not seen.

Aphelandra davidsonii is also morphologically similar to *A. jacobinioides* Lindau from Ecuador and Peru. This new species is distinguished by being a low shrub, ca. 1.3 m tall; stems glabrous, drying brownish; leaf blades smaller, 10.5–15 cm long and 3.5–5 cm wide, firm; bracts yellow, narrowly obovate, somewhat asymmetrical, obscurely 2-lobed at apex; bractlets glabrous at apex and corollas yellowish-green, 28 mm long, tube 25 mm long, 4 mm wide at mouth. In contrast, plants of *A. jacobinioides* are shrubs to 4 m tall; branches are puberulous, not drying brownish; leaf blades are 16–20 cm long, 6–8 cm wide, membranous; bracts greenish, broadly ovate, symmetrical, truncate and submucronate at apex; bractlets apically pilose and corollas orange to yellow, 48 mm long, tube 42 mm long, 16 mm wide at mouth.

Distribution.—Dense primary montane forest on steep NW slope at elevation between 1500 and 1800 m.

Material studied in addition to the type: **PERU. Huanuco:** Divisoria, between Tingo María and Boquerón, 1500–1800 m, *Ferreya* 1675 (GH, US).

Aphelandra aucayacuensis Wasshausen, sp. nov. (**Fig. 4 A–F**). TYPE: PERU. HUANUCO. Prov. Leoncio Prado: Distrito Jose Crespo y Castillo, Quebrada de Sangapilla, near to Aucayacu, 600 m, 4 Mar 1978, *José Schunke* V. 9992 (HOLOTYPE: MO; ISOTYPE: US).

Herb or shrub 0.3–1.3 m tall; stems terete to subquadrangular, glabrous, drying dark reddish-brown. Leaves long-petiolate, the petioles (unwinged portion) 1–3 cm long, glabrate to sparingly puberulous, the blades broadly elliptic to obovate, 11–20 cm long, 5–9 cm wide, acuminate at apex, narrowed and attenuate at base, glabrous, membranous, the primary veins (9–11 pairs) glabrous, conspicuous on both the upper and lower surface, the margin entire. Inflorescence of 3–8 short, axillary and terminal spikes, these few-flowered and congested at the tips of branches, the peduncles 1–3 cm long, dark reddish-brown; bracts green, lower broadly



FIG. 3. A–H: *Aphelandra davidsonii* (Davidson & Jones 9276). A. Habit. B. Bract. C. Bractlets and calyx lobes. D. Bractlets. E. Corolla and anther thecae. F. Corolla expanded showing attachment of filaments and anther thecae. G. Bractlets, calyx lobes and pistil. H. pistil and nectar disk.



FIG. 4. A–F: *Aphelandra aucayacuensis* (Schunke V. 9992). A. Habit. B. Lower bract. C. Upper bract. D. Bractlets. E. Bractlets, calyx lobes, style and ovary. F. Corolla and anther thecae. G. Corolla expanded showing attachment of filaments and anther thecae.

ovate, 12–15 mm long and 12–13 mm wide, apically somewhat asymmetrically bilobed, becoming narrower to ca. 10 mm wide toward apex, apically acute, all firm, glabrous, minutely gland-dotted, distinctly parallel nerved, margin entire; bractlets lanceolate, somewhat shorter than the calyx lobes, 4 mm long, 1.5 mm wide, striate-nerved, subhyaline, glabrous, minutely ciliolate at apex; calyx 4–5 mm long, the lobes lanceolate, striate-nerved, subhyaline, glabrous, the posterior lobe 1.5 mm wide, the anterior pair 1 mm wide, the lateral pair 0.5 mm wide, all minutely ciliolate at apex; corolla yellow, 30 mm long, glabrous, the tube suberect, 25 mm long, 4 mm wide at base, 7–8 mm wide at mouth, the upper lip erect or spreading, 5 mm long, the lobes 1 mm long and 2 mm wide, puberulous within, the lower lip 3-lobed, the middle lobe 4 mm wide, the lateral lobes 3 mm long and 3 mm wide, all obtuse or rounded; stamens reaching the tip of the upper lip; filaments tomentose at point of insertion; anther thecae 3 mm long. Capsule green, clavate, 12–13 mm long, 4 mm wide, blunt at tip, nitid, glabrous; seeds dark brown, flat, suborbicular, 4 mm in diameter, sparingly papillose.

Aphelandra ancayacensis is also morphologically similar to the more widespread species *A. jacobinioides* from Ecuador and Peru. It is distinguished from the later species by plants being somewhat smaller herbs or shrubs, 0.3–1.3 m tall; stems dark reddish-brown; leaf blades elliptic to obovate; peduncles dark reddish-brown, somewhat longer, 1–3 cm long; bracts green, 12–15 mm long and 10–13 mm wide, lower apically somewhat asymmetrically bilobed, upper apically acute, all minutely gland-dotted and corollas yellow, 30 mm long, tube 25 mm long, 7–8 mm wide at mouth. In contrast, *A. jacobinioides* are plants of shrubs to 4 m tall; stems not dark reddish-brown; leaf blades oblong-elliptic; peduncles not dark reddish-brown, shorter, 1–2 cm long; bracts green, 10 mm long, 9 mm wide, all uniform in shape and size, truncate and submucronate at apex, lacking glandular dots and corollas orange to yellow, 48 mm long, tube 42 mm long, 16 mm wide at mouth.

Distribution.—In well-drained soils, primary forest on the upper river terrace at elevations between 325 and 650 meters.

Material studied in addition to the type: **PERU. San Martín:** 23 km S of Nuevo San Martín (72 km S of Shumanza), 7°45'S, 76°35'W, 650 m, 16 Jul 1982, Gentry, Smith & Tredwell 37590 (MO, US). **Huanuco:** Cerros Cucharas, 620 m, 5 Mar 1954, Woytkowski 1146 (US). **Pasco:** Prov. Oxapampa, Palcazu valley, Cabeza de Mono, 5–6 km W of Iscosacin, 10°12'S, 75°14'W, 325 m, 14–15 Apr 1983, D.N. Smith 3699 (MO, US).

Aphelandra schunkei Wasshausen, sp. nov. (**Fig. 5A–G**). TYPE: PERU. HUANUCO. Prov. Leoncio Prado: Distrito Rupa Rupa, E of Tingo María, near Cerro Quemado, 672–800 m, 27 Feb 1978, José Schunke V. 9944 (HOLOTYPE: MO; ISOTYPE: US).

Herbs or shrubs 0.4–1.5 m tall; stems subquadrangular, glabrous. Leaves petiolate, the petioles 1.5–3 cm long, glabrate to puberulous, the trichomes sordid, the blades elliptic to broadly elliptic to oblong, 15–22(–26) cm long, 4–7(–9) cm wide, acuminate at apex, narrowed and attenuate at base, rather firm, glabrous, shining intensely olive-green, venation prominent on lower surface, the primary veins (14–18 pair) glabrous or puberulous, the trichomes appressed, the margin entire or slightly undulate. Inflorescence of 2–10 short, axillary and terminal spikes, these few-flowered and congested at the tips of the branches, the peduncles 2–2.5 cm long, glabrous, canaliculated, bracts intensely green, narrowly obovate to ovate, 13–17(–24) mm long and 8–10(–14) mm wide, firm, glabrous glandular punctuate, striate-nerved, acuminate at apex, cuneate at base, margin entire; bractlets lanceolate, shorter than calyx lobes, 2.75–3 mm long, 1 mm wide, striate-nerved, subhyaline, glabrous, ciliolate at apex; calyx 4–5 mm long, the lobes lanceolate, striate-nerved, subhyaline, glabrous, the posterior lobe 1.5 mm wide, the anterior pair 1 mm wide, the lateral pair 0.5 mm wide, all minutely ciliolate at apex; corolla yellow to greenish yellow, 35–40 mm long, glabrous, the tube suberect, 30–35 mm long, 4 mm wide at base, 7–9 mm wide at mouth, the upper lip erect or spreading, 5–7 mm long, the lobes 3 mm long and 3.5 mm wide, puberulous within, the lower lip 3-lobed, the middle lobe 3.5–4 mm in diameter, the lateral lobes 3 mm long and 3.5 mm wide, all obtuse or rounded; stamens reaching the tip of the upper lip; filaments tomentose at point of insertion; anther thecae 4 mm long, dorsally tomentose; ovary 3 mm high, glabrous; style 30–35 mm long, slightly exceeding the anther thecae. Capsule green, clavate, 13 mm long, 4 mm wide, blunt at tip, nitid, glabrous; seeds dark brown, flat, suborbicular, 4 mm in diameter, sparingly papillose.

Aphelandra schunkei is morphologically similar to *A. davidsonii* Wasshausen also found in the Department of Huanuco, Peru. This new species is distinguished by having larger leaf blades, 15–22(–26) cm long and 4–7(–9) cm wide; green spikes on longer peduncles 2–2.5 cm long; bracts intensely green, 13–17(–24) mm long



FIG. 5. A–G: *Aphelandra schunkei* (Schunke V. 9944). A. Habit. B. Bract. C. Bractlets. D. Bractlets and calyx lobes. E. Corolla. F. Corolla expanded showing attachment of filaments and anther thecae. G. Capsule, retinacula and seeds.



FIG. 6. A–H: *Aphelandra espinosae* (Klitgaard et al. 532). A. Habit. B. Spike and corollas. C. Bract. D. Bractlets. E. Bractlets and calyx lobes. F. Corolla, stamens and pistil. G. Corolla expanded showing 2 of the 4 stamens and attachment of filaments and pistil. H. Ovary, nectar disk and base of calyx lobes.

and 8–10(–14) mm wide, acuminate at apex and corollas somewhat longer, 35–40 mm long, the tube 30–35 mm long and 7–9 mm wide at mouth. In contrast, in *A. davidsonii* the leaf blades are 10.5–15 cm long, 3.5–5 cm wide; the spikes are yellow, the peduncles 1.5–2 cm long; bracts yellow, 10–12 mm long and 7–8 mm wide, obscurely 2-lobed at apex and the corollas 28 mm long, the tube 25 mm long and 4 mm wide at mouth.

Distribution.—Primary and secondary wet forest at elevations between 350–900 m.

Material studied in addition to the type: **PERU: San Martín:** Mariscal Caceres, Dpto. Tocache Nuevo, estuary of the Río Mishollo (right margin of Río Huallaga), 7 Mar 1971, *Schunke* V. 4751 (US); Quebrada Luis Salas (5 km NE of Puerto Pizana, 350–370 m, 3 Aug 1973, *Schunke* 6657 (US); road to Shunte, (E of the Palo Blanco bridge), 500–800 m, 14 Jul 1974, *Schunke* V. 7387 (US); Prov. Mariscal Caceres, Madre Mia, 760–880 m, 15 Mar 1977, *Boeke & Ramirez* 1274 (US). **Huanuco:** Prov. Huanuco, Tingo María, 5 Jul 1940, *Asplund* 12272 (S); Prov. Leoncio Prado, Río Pacayaco, Pacayaco bridge, 570 m, 30 Mar 1976, *Plowman & Kennedy* 5774 (US); Prov. Leoncio Prado, Dpto. Rupa Rupa, E of Tingo María, on edge of the quebrada, 700 m, 20 Nov 1971, *Schunke* V. 5172 (US); E of Tingo María, near Cerro Quemado, 672–800 m, 22 Feb 1978, *Schunke* V. 9946 (US); Prov. Leoncia Prado, Dpto. Daniel Alomias Robles, W of Restaurant Canabraba, around Delicios, 800–900 m, 18 Jun 1976, *Schunke* V. 9316 (US). **Pasco:** Prov. Oxapampa, W side of Cordillera San Matias, between Iscosacin and summit, 10°11'S, 75°12'W, 680–850 m, 22 Jun 1982, *D. Smith* 2037 (MO, US).

Aphelandra espinosae Wassshausen, sp. nov. (**Fig. 6A–H**). TYPE: ECUADOR. LOJA: Hda. Banderones, which is 2 hours walk from 5 km road Limo-Casaderos, 80°10'15'W, 03°58'660'S, 1000 m, 9 May 1997, B.B. Klitgaard, P. Lozano, T. Delgado, N. Aguirre, H. Aleyandro & R. Tapia 532 (HOLOTYPE: US; ISOTYPE: LOJA).

Herb to 0.5 m tall; stem subquadrangular, woody, glabrous, covered with warty protuberances. Leaves long-petiolate, the petioles (unwinged portion) 2–2.5 cm long, canaliculated, glabrous, the blades oblong to ovate, 10–11.5 cm long, 4–5.5 cm wide, glabrous, acuminate at apex, narrowed and conspicuously long-attenuate at base, membranous, the upper surface dark-olive, the lower surface pale-olive, the lateral veins rather inconspicuous, more prominent beneath than above, the margin entire or slightly undulate. Inflorescence of 1–3 short, axillary and terminal spikes, these few-flowered, 4.5 cm long and 2 cm wide (without spreading corollas), congested at tips of the branches, peduncles lacking; bracts densely imbricate, pale yellow with green venation and green apices, ovate, 15–16 mm long and 10–11 mm wide, somewhat asymmetrical, glabrous, acute to acuminate at apex, the tip minutely apiculate, cuneate at base, 3–5-nerved, margin provided with 2 pairs of minute dents, ciliolate; bractlets linear, subcarinate, 10 mm long, 1.5 mm wide, aristate, striate nerved, subhyaline, glabrous; calyx lobes linear, 12 mm long, aristate, striate-nerved, subhyaline, glabrous, the posterior lobe 2.5 mm wide, the anterior pair 2 mm wide and the lateral pair 1.5 mm wide; corolla orange, 50–55 mm long, sparingly puberulous, the tube erect, 2 mm wide at base, slightly narrowed at 5 mm above base, thence gradually expanded to 8 mm wide at mouth, the upper lip erect, narrowly ovate, 16 mm long, 11 mm wide, retuse at apex, the lower lip spreading, 3-lobed, the middle lobe ovate, 16 mm long, 11 mm wide, obtuse to rounded and sparingly pilose at apex, the lateral lobes narrowly ovate, 12 mm long, 7 mm wide, obtuse or rounded at apex; stamens exerted 10 mm beyond the mouth of the corolla tube; anther thecae 4 mm long; ovary 4 mm long, 2 mm wide, glabrous. Capsules not seen.

Aphelandra espinosae is morphologically similar to *A. guayasii* Wasshausen also from Ecuador. The new species is distinguished by being herbaceous, 0.5 m tall, having sessile spikes, glabrous bracts with margins denticulate and corollas orange, 50–55 mm long, sparingly puberulous. In contrast, plants in *A. guayasii* are suffrutescent, to 0.75 m tall, and have pedunculate spikes densely white-glandular pilose, and entire bracts and corollas straw-colored, 55–65 mm long and sparingly pilose to glandular-pilose.

Distribution.—This species is known only from the type locality.

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